MOUNTBAKER-SNOQUALMIENATIONAL FOREST SPECIALIST REPORT OUTLINE ENVIRONMENTAL ASSESSMENT

Date 10/03/2016

S.F. Stillaguamish Vegetation Project [Recreation] [Stella Torres]

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1. Applicable Laws, Regulations, and Policies

Laws:

The National Environmental Policy Act of 1969, <u>as amended (Pub. L. 91-190, 42 U.S.C. 4321-4347, January 1, 1970, as amended by Pub. L. 94-52, July 3, 1975, Pub. L. 94-83, August 9, 1975, and Pub. L. 97-258, § 4(b), Sept. 13, 1982)</u>

It is the continuing responsibility of the Federal Government to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, functions, programs, and resources to the end that the Nation may:

Assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings:

Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;

Preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment, which supports diversity and variety of individual choice;

Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities;

The Federal Land Policy and Management Act of 1976, as amended (Pub. L. 94-579, 43 U.S.C. 1701(note)

In managing the public lands, the Secretary shall, subject to this Act and other applicable law and under such terms and conditions as are consistent with such law, regulate, through easements, permits, leases, licenses, published rules, or other instruments as the Secretary deems appropriate, the use, occupancy, and development of the public lands, including, but not limited to, long-term leases to permit individuals to utilize public lands for habitation, cultivation, and the development of small trade or manufacturing concerns.

1984 Washington Wilderness Act(Pub. L. 98-339

This legislation established the Boulder River Wilderness. The wilderness boundary abuts potential treatment units. Section 9 of the legislation states:

"Congress does not intend that designation of wilderness areas in the State of Washington lead to the creation of protective perimeters or buffer zones around each wilderness area. The fact that nonwilderness activities or uses can be seen or heard from areas within the wilderness shall not, of itself, preclude such activities or uses up to the boundary of the wilderness area."

Regulations:

16 United States Code (USC) - Sec. 551. Protection of National Forests; Rules and Regulations

The Secretary of Agriculture shall make provisions for the protection against destruction by fire and depredations upon the public forests and national forests which may have been set aside or which may be hereafter set aside under the provisions of section 471 (1) of this title, and which may be continued; and he may make such rules and regulations and establish such service as will insure the objects of such reservations, namely, to regulate their occupancy and use and to preserve the forests thereon from destruction.

- 36 Code of Federal Regulations (CFR) Ch. II 261.10 Occupancy and use.
 - The following is prohibited:
 - (a) Constructing, placing, or maintaining any kind of road, trail, structure, fence, enclosure, communication equipment, significant surface disturbance or other improvement on National Forest lands or facilities without a special-use authorization, contract, or approved operating plan when such authorization is required.
- 36 Code of Federal Regulations (CFR) Ch. II 261.12 National Forest System roads and trails.

The following is prohibited:

- (c) Damaging and leaving in a damaged condition any such road, trail or segment thereof.
- (d) Blocking, restricting, or other-wise interfering with the use of a road, trail or gate.

Policy:

FSM 2330.3 - Policy

- 6. Establish priorities for the development and management of sites in the following order:
 - Ensure public health and safety
 - Protect the natural environment of the site.

 Manage and maintain sites and facilities to enhance users' interaction with the natural resource.

FSM 2332.1 - Public Safety

To the extent practicable, eliminate safety hazards from developed recreation sites. Inspect each public recreation site annually before the beginning of the managed-use season. Maintain a record of the inspections and corrective actions taken with a copy of the operation and maintenance plan.

2. Relevant Standards and Guidelines

1990 Land and Resource Management Plan – Mt. Baker-Snoqualmie National Forest (LRMP) and 1994 Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl (ROD)

Forest-Wide Directions

General

 Other resource activity planning should incorporate plans to provide or improve compatible recreation facilities/services (1990 LRMP, p. 4-84).

Developed Recreation

o Provide for visitor safety, sanitation and protect facility and site resources (1990 LRMP, p. 4-85).

Trails

- Provide a system of trails that compliments resource capabilities and diverse users (1990 LRMP, p. 4-86 to 4-87).
- o Trails shall assume the Visual Quality Objective (VQO) of the Management Area (MA) they pass through (1990 LRMP, p. 4-86 to 4-87).
- A broad spectrum of trail types will be provided (1990 LRMP, p. 4-86 to 4-87).
- Seasonal use restrictions will be utilized to manage conflicts in use (1990 LRMP, p. 4-86 to 4-87).

Management Area 1B Semi Primitive Non-Motorized

 Trails located to take advantage of viewing opportunities located in high visual Absorption Capability terrain, and serve to disperse users (1990 LRMP, p. 4-161).

Management Area 1D Roaded Natural

 Emphasis will be given to day use recreation and facilities (1990 LRMP, p. 4-166).

Matrix Management Area 2A (Scenic ViewshedForeground)

- O Developed site may be allowed. Plan for roaded natural and rural ROS class standards (1990 LRMP, p. 4-169).
- Occupancy and use of recreation sites shall be regulated to the extent necessary to protect the resources and to ensure safe, enjoyable recreation experiences (1990 LRMP, p. 4-176).

Matrix Management Area 2B (Scenic Viewshed Middle Ground)

Developed Recreation Sites (Public Sector)

- Within the designated Scenic Viewshed Corridor (2B-Middleground), developed sites may be allowed. Plan for semi-primitive motorized, roaded natural and roaded modified ROS class standards (1990 LRMP, p. 4-172).
- Occupancy and use of recreation sites shall be regulated to the extent necessary to protect the resources and to ensure safe, enjoyable recreation experiences (1990 LRMP, p. 4-176).

Management Area 5A Recommended Recreation Rivers

- Proposed recreation activities shall be compatible with river values. Development scale should not exceed level 4.
- Occupancy and use of recreation sites shall be regulated to the extent necessary to protect the resources and to ensure safe, enjoyable recreation experiences (1990 LRMP, p. 4-176).

3. Other Programmatic Direction

4. Definitions of Technical Terms

Analysis Area – The defined unit area boundaries and adjacent inter-facing areas (see Stillaguamish Vegetation Project Map) within the South Fork Stillaguamish River subwatershed that will be used to analyze the environmental and social effects from the proposed action.

Code of Federal Regulations (CFR)- A codification of the general and permanent rules published in the Federal Register by the Executive departments and agencies of the federal government.

Developed Recreation- Recreation that requires facilities that, in turn, result in concentrated use of an area. Examples of recreation areas include, major trailheads, Picnic areas, view points, campgrounds and ski areas; facilities in these areas might include roads, signing, fee collection equipment, parking lots, picnic tables, toilets and/or drinking water.

Dispersed Recreation- Recreation that is outside of a developed recreation site and no facilities are provided for comfort or access. Such uses within the project area may include scenic driving, hiking, fishing, cross-country skiing, snowmobiling, hunting, backpacking and recreation in primitive environments or settings.

Inventoried Roadless Area – Portions of the project area abut the inventoried Glacier Peak K roadless area. Management activities are not permitted within the boundary of this area.

Motorized Vehicle – This is intended to apply to all two and four wheel motorized vehicles and smaller three-wheeled vehicles which are 40' or less in length. (These are not permitted on any road or trail within the project area.)

Non-motorized Vehicle – This is intended to apply to all pedal driven equipment with two wheels, no motorized means of motion and less than 6' or less in length. (These are not permitted on any trail within the project area.)

Mitigation - Avoiding or minimizing impacts by limiting the degree or magnitude of the action and its implementation; rectifying the impact by repairing, rehabilitating, or restoring the effected environment; reducing or eliminating the impact by preservation and maintenance operations during the life of the action.

Off Season – Period of year (October 1st thru April 31st) outside the peak season and recreation use significantly declines within the corridor.

Peak Season – Period of year (May 1st thru September 30th) when a majority of recreation facilities/sites receives heavy use within the corridor and includes developed and dispersed type experiences.

Persons-At-One-Time (**PAOT**)- The number of people in an area or using a facility at the same time may be used as 'maximum PAOT" to indicate the capacity of an area or facility to support peak usage within established user density standards and without degradation to biophysical resources.

Recreation Capacity— Estimated total number of people that can take advantage of the supply of a recreation opportunity during an established use period without substantially diminishing the quality of the recreation experience or the biophysical resources.

Recreation Opportunity Spectrum (ROS)- A conceptual framework for defining types of recreation opportunities, physical settings, and experiences a visitor can expect.

Roaded Natural –An ROS Area that is characterized by predominantly natural-appearing environments with moderate evidence of the sights and sounds of mankind. Such evidence usually harmonizes with the natural environment. Interaction between users may be moderate to high, with evidence of other users prevalent. Resource modification and utilization practices are evident, but harmonize with the natural environment. Conventional motorized use is allowed and incorporated into construction standards and design of facilities.

Semi-Primitive Non-Motorized—An ROS Area that is characterized by a predominately natural appearing environment of moderate to large size, minimum onsite controls and restrictions may be present, motorized use is not permitted.

5. Best Management Practices (BMP) and Mitigation Measures

The following Standards from the Forest Plan, as amended (2005, 2005a), apply to all alternatives:

Recreation				
REC1– To facilitate the safe completion of logging-related operations associated with proposed harvest units, and to maintain full public access to highly desired recreation sites, the Heather Lake, Mt. Pilchuck, Sunrise Mine, Boardman Lake, and Walt Bailey/Mallardy Ridge trail/trailheads will remain open to the public from Friday at noon through Sunday and holidays. In addition, potential closure periods will last no more than 3 months during the peak season (May through Sep) and 4 months during non-peak season (Oct thru Apr) when feasible.	Provide for public safety where mixing of uses would increase conflict and risk. Minimize potential for non-operational disruptions with partial closures	HIGH Logic: Partial closures would cause production loss and reduced efficiency, extending the time required to finish work in most harvest stands.	Forest Plan (1994- Amended), Forest-Wide S&G's (pg. 4-84 to 4- 87) and Matrix/MA 2A&2B S&G's (pg. 4- 177)	Sale preparation, T.S. Contract and TSA Temporary barricades and signing may also be installed.
REC2 – Because of a lighter demand/visitation experienced during October through April, up to two recreation sites/access roads including roads used to access high use recreation sites may be closed at any one time during non-peak period to public access. This will better allow completion of logging activities and reopening of sites on or before May 30 th .	Maintain a significant portion of hiker accessibility and parking capacity within the entire MLSB corridor commensurate with peak season accessibility limitations.	MODERATE – HIGH Logic, Staff Experience In the MLSB recreation corridor, during May-September trails/trail-heads can handle an estimated 200 to 300 daily visitors. Thus, there remains opportunity for displaced recreationists on unaffected trails such as Barlow Pass, Lake 22, Mt. Dickerman etc.	Forest Plan (1994-Amended), Forest-Wide S&G's (pg. 4-84 to 4-87) and Matrix/MA 2A&2B S&G's (pg. 4-177)	Sale preparation, T.S. Contract and TSA TSA for change in operational season.

REC3 –During the peak season (May through September), only one of the two highest use recreation sites (Heather Lake, Mt. Pilchuck) within the corridor will be allowed to remain closed to the public at any one time during this critical period, unless it is deemed unsafe to perform logging activities while the site is open.	Maintain overall hiker accessibility and parking capacity within the entire MLSB corridor commensurate with peak season accessibility and historic fluctuations in use.	MODERATE-HIGH Logic, MBS Experience: In the MLSB recreation corridor, Mt. Pilchuck and Heather Lake trailheads are two of the highest use sites. Impact to recreation resources is high if both sites are closed for long periods of time.	Forest Plan (1994- Amended), Forest-Wide S&G's (pg. 4-84 to 4- 87) and Matrix/MA 2A&2B S&G's (pg. 4- 177)	Sale preparation and TSA. A timber sale contract special clause (Part C) can establish priority unit cutting designations and timing restrictions and/or limitations associated with the Special Closure order.
REC4– Public access (peak and non-peak recreation season) through or near units being logged to reach both developed and dispersed recreation sites will be provided from Friday noon to Sunday mid-night and on all holidays falling on a weekday.	Provide unrestricted public access to all recreation sites not affected directly by either a special closure related to ongoing logging activities. Provide a public notification plan that addresses all means to be utilized and logistical aspects with informing the public of key entry points and potential hazards and likely delays.	MODERATE – HIGH MBS Experience (see REC1)	Forest Plan (1994- Amended), Forest-Wide S&G's (pg. 4-84 to 4- 87) and Matrix/MA 2A&2B S&G's (pg. 4- 177)	Sale Contract

6. Analysis Methodology, Assumptions

The methods used to determine the effects the proposed action needs to focus on both the physical and social changes that are involved within and outside the potential closure areas during thinning operations. TheStandards and Guidelines associated with the desired recreational use, opportunities and expectations within the various management areas covered in the corridor serve as a base for determining effects. The relational measurement criteria/indicators will be used to give an indication or trend of what current conditions exist and what changes (physical, temporal & social) if any, would be expected if the proposed action is implemented. To establish this base or background level of analysis and direction, the following resources were used initially to compile, tabulate and evaluate conditions:

• S&G's for Mt. Baker-Snoqualmie Land and Resource Management Plan (June 1990)

- S&G's for Matrix Allocation for the Amended Mt. Baker-Snoqualmie Land and Resource Management Plan (April 1994)
- Forest Service Manual and Handbook Direction
- Field reconnaissance, past history, surveys, existing conditions and impacts
- Staff experience, visitor use monitoring data, public feedback
- District topographic & recreation maps

The following outline will be used to set the analysis framework for describing the affected environment; effects to patterns of use within and outside the corridor and perceived or actual effects experienced at different landscape scales associated with stand thinning activity, road maintenance level changes and recreation site improvements near or adjacent to recreation sites:

- Desired recreation experiences (Developed Recreation Facilities and Dispersed Recreation. Non-Wilderness Trails)
- Public safety
- Recreational Opportunity Spectrum (ROS) characteristics

7. Affected Environment

Background

The SF Stillaguamish Vegetation Project (Project) area is located on the Darrington Ranger District (SRD) of the Mt Baker-Snoqualmie National Forest. The legal description of the Project area includes sections in: Township 29 North (T29N), Range 9 East (R9E), Range10 East (R10E), and Range 11 East (R11E), Township 30 North (T29N), Range 8 East (R8E), Range 9 East (R9E), Range10 East (R10E), and Range 11 East (R11E), and in Township 31 North (T31N), Range 8 East (R8E). All of the recreation sites/areas potentially impacted by the Project are contained within the Mt. Loop Scenic Byway/Verlot Recreation Management Corridor and are managed as National Forest.

The Project is within 1 hour drive from the Seattle metropolitan area with a population base of over 2-3 million residents. Facilities and recreations sites are all typically open to the public during the peak season (May-September) with limited vehicle accessibility during the winter shoulder season (October-April) depending on road surface conditions, weather and snow level. Visitation along the corridoreasily averages 17,000 to 20,000 visitors per month during the peak season with a noticeable decrease for the remainder of the year.

Developed Recreation Facilities, Trails, Sites and Experiences

The Mountain Loop Scenic Byway (MLSB) is the gateway to one of the most visited areas on the Mt. Baker-Snoqualmie National Forest. Designated in 1991, the MLSB spans 52 miles from Darrington to Granite Falls and provides spectacular views and access to trails, campgrounds, picnic areas, and a large amount of dispersed recreational opportunities. The Verlot Public Service Center (PSC) near Granite Falls is a major stopping point for those coming into the corridor (39,819 visitors in 2015). In addition to providing Forest information, the Verlot PSC also sells merchandise, Recreation passes, and collects the receipts from other points of sale.

The MLSB Corridor offers a tremendous variety of developed and dispersed recreation on the Forest. Developed campgrounds, such as Gold Basin, the largest campground on the Mt Baker-Snoqualmie National Forest, is located on this portion of the MLSB. Currently, the campgrounds along the MLSB are operated by a private concessionaire. Along the MLSB there are 14 developed campgrounds. Gold Basin Campground has been closed since 2014, but the Ranger District is working to complete a geotechnical analysis that will determine its long term use. Approximately 10,330 individuals camped at the developed campgrounds along the corridor during the 2015 summer season.

Hiking, backpacking and water based recreation such as rafting, kayaking and fishing are other attractions along the MLSB. There are numerous trailheads and trails that people can use for day hikes or multi-day trips. In 2015, trailhead data collected from trails immediately off of the MLSB or roads that are served by the MLSB reported 61,566 individuals. This number represents individuals who voluntarily registered their hiking party. It is likely that the actual number of visitors is as much as double the registration count. Some of the highest use trails on the Mt. Baker-Snoqualmie National Forest are also located within the project area boundaries. These include Heather Lake, Mt. Pilchuck, Ice Caves Trail, Lake 22, and Dickerman/Perry Creek. On peak summer months, some of these trails can average between 4,000 to 7,000 visitors per month.

Recreation use in the project area is steadily increasing and is expected to continue to rise as the populations of neighboring Snohomish and King Counties are projected to increase by 8% in the next decade (Snohomish County, 2015; Washington State, 2012). Because of the close proximity to a growing population base of 2-3 million and other direct marketing of recreation opportunities throughout the MLSB, this corridor receives constant and intense pressure from the public and recreation user groups to provide easy access to wilderness, campgrounds, trailheads, trails, picnic areas, water based recreation and other dispersed areas to recreate and enjoy the National Forest. There is also an on-going planning effort by the Washington State Department of Natural Resources for the trail system in the adjacent Morning Star Natural Area (http://www.dnr.wa.gov/MorningStarTrails).

While most of the recreation facilities and trailheads provide adequate capacity for the existing demand, shifting patterns of use and changes in visitor behavior are leading to overcrowding at some trailheads such as Lake 22, Heather Lake, and Sunrise Mine. These trailheads currently do not have enough parking capacity for the amount of visitation during the peak season which leads to many visitors parking along the MLSB or other Forest Roads causing congestion and public safety concerns. In addition, destinations such as Sunrise Mine, Cutthroat Lakes (DNR, FS Trailhead) and Boardman Lake currently do not provide adequate visitors services, parking capacity and amenities for the level of use.

The following tables summarize the scope and scale of developed recreation experiences within the MLSB recreation corridor, when use is expected, user accessibility and relative popularity of the sites within the analysis area boundary.PAOT is an acronym for Persons-At-One-Time; a measure of facility or site *designed* recreation carrying capacity, particularly for developed sites. National conventions include 5 persons per family picnic/camp unit, 3.5 persons per

parking lot stall at a trailhead or visitor center, 1.5 persons per motorcycle parking stall and 40 persons per tour bus parking stall.

Table 1. DEVELOPED RECREATION WITHINCORRIDOR

Facility Type(s)	Capacities	Periods of Use	Accessibility	Popularity
Campgrounds	11 developed facilities 4 Campgrounds 7 Group Campgrounds @ 11,000 PAOT's	May thru Oct. (Fee based Mntc.)	Fully Accessible to all users & vehicles	40-60% average annual occupancy with 100% on weekends
Interpretative Trails	2 developed facilities Youth on Age and Gold Basin Mill Pond @ 175 PAOT's	Year round or when snow free (Fee based Mntc.)	Fully Accessible to all users	10-20% occupancy on peak season weekends
Non Wilderness Trails & Trailheads	17 developed facilities @ 5,000 PAOT's	Year round or when snow free (Fee based Mntc.)	Multi-user trail facilities	70-120% use on peak season weekends
Wilderness Trails & Trailheads	4 within project area: Lake Kelcema, Three Fingers, Meadow Mountain Trail and Marten Creek Trails	July-September or when snow free	Three Fingers and Meadow Mountain trail are currently inaccessible due to road closure; Lake Kelcema and Marten Creekare fully accessible to most vehicles	10% average occupancy during peak season
Picnic Areas	3 developed facilities (Hemple Creek, Dick Sperry, Big 4 @ 300-400 PAOT's	Year round or when snow free (Fee based Mntc.)	Fully Accessible to all users & most vehicles	60-80% average occupancy on peak season weekends for Hemple Creek and Dick Sperry; 100- 110% average occupancy for Big 4
State Trails	3 developed facilities (Mt. Pilchuck State Park,Sunrise Mine Trail, Walt Bailey Trail) @ 450-500 PAOT's	April thru Sept. (Fee based Mntc.)	Fully Accessible to all users & most vehicles	30-100% ave occupancy on weekends during peak season; formal entry access points exist on USFS lands and portions of the trail are on both USFS and State managed land
Snow Parks	1 semi-developed area (Deer Creek Snopark)	November-March (Fee based Mntc. through agreement	Accessible to all users and most vehicles	60-80% average occupancy during peak winter months

	with Snohomish	
	County	

Dispersed Recreation Facilities, Sites and Experiences

Dispersed recreation within the project area includes camping, picnicking, hunting/gathering, fishing, birding, driving for pleasure and viewing scenery among other activities. Because of the close proximity of the corridor to a major metropolitan area, use and demand for access to dispersed recreation sites and experiences have been heavy and increasing with the growth of the general population. In addition, the closure of Gold Basin Campground has caused additional increase in dispersed use as observed by recreation management staff. While this form of recreation has not been an active management focus within the corridor, dispersed recreational access is limited when sites close or when access is interrupted. Interest in finding alternate sites to closed areas causes the public to travel further up the corridor and along FS roads to seek out sites that they can legally use. Pressure from these displaced users has been noticeable to USFS operations in the forms of recreation use conflicts, human waste, increased trash dumping and other illegal activities found along many of these sites.

Table 2. DISPERSED RECREATION WITHINPROJECT AREA

Facility Type(s)	Capacities	Periods of Use	Accessibility	Popularity
Camp Sites & day- use areas	75-80 dispersed sites; this inleudes those along the main stem of MLSB and along FS roads within the project area @ 100-200 PAOT's in the SF Stillaguamish River Watershed	Year round or when snow free Non-fee	Limited motorized accessibility in some sites along FS roads, Fully Accessible for those along mainstem of MLSB	34-70% average annual occupancy/use on peak season weekends higher than average especially near water or trailheads
Forest Roads – Access To Recreation Sites &Non-Wilderness Areas	8primary or secondary travel corridors depending on level of use(FS Rd #41 currently closed at mile 8 due to bridge damage, 42#4020, #4021, #4030,#4052, 4065, 4060) with a maintenance level 2 or 3	Year round or when snow free Non-fee if greater than 1/4 mile from developed sites	Fully Accessible to all users and most motor vehicles when favorable road conditions	Heavy on peak season weekends depending on facilities accessed
State Byways: Mt. Loop Scenic Byway	1 road facility with a maintenance level 5 or higher	Year round or when closed due to snow level exceeding 2	Fully accessible to all users and motor vehicles except	60-70% use on peak season weekends (10,000 – 15,000

	feet between Deer	during partial winter	Vehicles per day)
	Creek and Bedal	closure	

Recreation Opportunity Spectrum (ROS)

The Recreation Opportunity Spectrum (ROS) is both a classification system and a prescriptive tool for recreation planning, management, and research. It is used within the Forest Plan to describe the recreational setting by describing a combination of the physical, biological, social, and managerial conditions that give value to a place. There are seven defined ROS classes in the 1990 Forest Plan:

- 1 Primitive Area is characterized by an essentially unmodified natural environment of fairly large size. Interaction between users is very low and evidence of other users is minimal. The area is managed to be essentially free from evidence of human-induced restrictions and controls. Motorized use within this area is not permitted.
- 2 Semi-primitive Motorized Area is characterized by a predominately natural appearing environment of moderate to large size, minimum onsite controls and restrictions may be present, motorized recreational use of roads with natural surface and trails suitable for motor bikes is permitted.
- 3 Semi-primitive Nonmotorized Area is characterized by a predominately natural appearing environment of moderate to large size, minimum onsite controls and restrictions may be present, motorized use is not permitted.
- 4 Roaded Natural Area is characterized by predominately natural appearing environment with moderate evidence of man, resource modification and utilization practices are evident, conventional motorized use is allowed.
- 5 Roaded Modified Area is characterized by a predominately altered environment, allowing for noticeable to strong evidence of management activity.
- 6 Rural Area is characterized by a natural environment that has been substantially modified by development, resource modification and utilization may be used, a considerable number of facilities are designed for use by a large number of people, facilities for intensified motorized use and parking are available.
- 7 Urban High Degree of site modification. Facilities mostly designed for comfort and convenience. Access usually by high-speed highways.

Within the proposed project area, four of the ROS classes are present. The following table depicts the acres per proposed ROS class. Also see the ROS map in attachments.

ROS	Acres
Roaded Modified	27,210

Roaded Natural		21,135
Rural		631
Semi-Primitive Non- Motorized		16,252
	Total	65,228

8. Environmental Effects (includes Cumulative)

Overview

This effects analysis focuses on the physical and social changes within and outside the project area. To address the Forest Plan Standards and Guidelines (S&Gs) associated with the desired recreational use, opportunities, and expectations within the various management areas in the project area, qualitative measurement criteria and indicators are used to give an indication or trend of what current conditions exist and what changes (physical, temporal & social) if any, would be expected if the proposed action is implemented. The following resources were used initially to evaluate conditions:

- S&G's for Mt. Baker-Snoqualmie Land and Resource Management Plan (June 1990)
- S&G's for Matrix Allocation for the Amended Mt. Baker-Snoqualmie Land and Resource Management Plan (April 1994)
- Forest Service Manual and Handbook Direction
- Field reconnaissance, past history, surveys, existing conditions and impacts
- Staff experience, public feedback
- District topographic & recreation maps

The following outline of concerns set the analysis framework for describing the affected environment, effects to patterns of use within and near the project area, and perceived or actual effects experienced at different scales associated with harvest activity near or adjacent to recreation sites:

- Desired recreation experiences (Developed Recreation Facilities and Dispersed Recreation, Front Country Trails, Backcountry Trails)
- Public safety
- Recreational Opportunity Spectrum (ROS) characteristics

All of the recreation sites potentially impacted by the project are within the Mt. Loop Scenic Byway (MLSB) which provides access to a large portion of the developed and dispersed recreation opportunities offered on the Darrington Ranger District. Lands where recreation

sites occur that would be directly affected by this decision are managed as National Forest and contained within the South Fork Stillaguamish River and MLSB recreation corridor.

The project is within one hour of the Seattle metropolitan area with a population base of over 2-3 million residents. Facilities and recreation sites are typically open to the public during the peak season (May-September), with limited vehicle accessibility during the off-season (October-April), depending on road surface conditions, weather, and snow level. Daily visitation in the entire corridor averages 7,000 to 10,000 visitors per month from May to September with a noticeable decrease for the remainder of the year or during inclement weather.

The Corridor provides a wide variety of recreation opportunities and experiences (developed and dispersed), which are accessible and open throughout most months of the year except when the MLSB closes at Deer Creek. Because of this public exposure, and other direct marketing of recreation opportunities through a variety of local agencies and nonprofit organizations, this corridor receives constant and intense pressure from the public to provide easy access to hiking trails, campgrounds, wilderness trails, picnic areas, and other dispersed areas to recreate and enjoy the National Forest, Washington State Parks, and adjacent State managed lands.

Because of the proximity and easy accessibility of the corridor to a major metropolitan area, use and demand for access to dispersed recreation opportunities and experiences have been heavy and increasing with the growth of the general population. Dispersed recreational access has been restricted over the last 2 years along the corridor with temporary or permanent closures of recreation sites such as Gold Basin Campground, Ice Caves Trail, and Monte Cristo Town site. Interest in finding alternate sites displaces users placing additional pressure on other easy to access trails and dispersed camping areas along the corridor.

Direct and Indirect Effects on Recreation

The analysis area for direct and indirect effects on recreation resources (developed recreation, dispersed recreation, wilderness, and visual management corridors) contains the proposed thinning both commercial and non-commercials stands within the project area, proposed recreation site improvements, and proposed road maintenance level changes.

Alternative 1 – No Action

Under this alternative, there would be no harvesting or temporary road construction or closures as a result of the proposed action inside the Analysis area. The public using or frequenting various recreation facilities and sites in the Analysis area would continue to experience recreational site and access situations and conditions commonly encountered in the past with some road access issues due to storm damage repairs or other unforeseeable circumstances that require temporary closures. Current conditions (i.e. recreation experiences, Public Safety, Recreational Opportunity Spectrum (ROS) characteristics) at dispersed sites, facilities, trailheads, and trails would not change under this alternative. However, opportunities for potential trailhead expansions or improvements in high use recreation areas or improvements to trails and recreation facilities within the corridor as a result of vegetation management activities would not occur. These sites would continue to be overcrowded and availability of parking, visitor amenities, and safety issues would continue

to be problematic at some high use recreation sites. In addition, the road conditions of the high use recreation sites will likely remain unchanged with current lack of adequate resources for regular maintenance. For example, washboarded roads, potholes and other rough driving conditions will likely remain the same to high use recreation sites such as Heather Lake, Mt. Pilchuck and Pinnacle/Bear lakes to name a few.

Alternative 2 – Proposed Action

Effects on Desired Recreation Experiences

Types and forms of experiences

The most common forms and types of recreational activities that occur in the analysis area are: hiking, backpacking, and car camping, sightseeing, picnicking, biking, hunting, gathering, fishing, kayaking or driving for pleasure. The vast majority of these activities would continue with no long term shifts, disruptions, or changes in use. Access to some trailheads may be impacted through temporary closures or disruptions during active thinning and hauling of vegetation along the road. Recreational use of dispersed sites near some of the more common & popular areas (i.e. Mt. Pilchuck/Heather Lake Road, Coal Lake/Indepedence Lake Rd, Deer Creek/Kelcema Rd, Boardman Lake Rd, Pinnacle/Bear Lake Rd, Sunrise Mine Rd.) would likely be temporarily impacted in certain locations along the road when active logging and hauling occurs along the road. In addition, closures of highly popular recreation sites such as Heather Lake, Mt. Pilchuck, Sunrise Mine, etc. during the non-peak or peak season will likely temporarily displace visitors desiring to recreate at these locations and force them to look elsewhere for hiking opportunities.

With various mitigations prescribed on scheduling and coordinating recreation facility closures, the disruption of public access to high use sites will be minimized to the extent possible. Closures of these sites during active thinning operations ensuressafety of visitors and greatly reduces the risk of injury from industrial related activities. The proposed alternative would delay recreational access through a temporary closure to one high use trailhead (Heather Lake, Mt. Pilchuck) at a time during the peak season. Temporary displacement of use or access to developed or dispersed sites would be absorbed by other available opportunities within the recreation corridor. The proposed alternative would have no long-term effect on the types and forms of various recreation experiences either within the analysis area or the recreation corridor and would provide an opportunity to potentially improve roads, expand and provide additional facilities on trailheads and other recreation sites adjacent to commercial logging units.

Uniqueness of the experiences

The alternative would have no long-term effect on the uniqueness of any recreation experience (dispersed or developed) either within or outside the Analysis Area or Corridor.

Availability of experiences

Use of all types of recreation sites, in the project area, have likely either shifted or expanded over the past several decades. Regional population growth has resulted in more people looking for opportunities to recreate, so use and demand for recreation on National Forests has also increased (Blahna and Krueger, 2007). Despite this increase, the development or reconstruction of other recreation opportunities and facilities (campgrounds, trails, picnic areas and trailheads) within the project area has remained somewhat static. Many trailheads such as Heather Lake, Sunrise Mine and Lake Twenty-Two currently do not provide

adequate parking spaces for the amount of visitation they receive leading visitors to park along the roads, constricting traffic and causing unsafe highway crossing conditions. The current level of use was assessed to determine which trailheads would be the most impacted from the proposed action. The recreation sites were rated as high, moderate, or low use sites and the analysis shows the greatest impacts to Heather Lake and Mt. Pilchuck trailheads in terms of the amount of visitors who would be displaced if these trails were closed or disrupted during the high peak season. However, with adequate mitigations and coordination, the effects will be temporary. Most other trails/trailheads within the corridor would have little to no likelihood of closure, major disruption or a high amount of displaced visitors as a result of the timber harvest operations (See tables 3 & 4 below).

Table 3. Summary of Potentially Impacted Recreation Sites and Severity of Impact

SITE NAME	SITE NUMBER	WEIGHTED AVERAGE ANNUAL OCCUPANCY %	POTENTIAL FOR CLOSURE DURING PEAK RECREATION SEASON	ESTIMATED DURATION OF CLOSURE
BOARDMAN LAKE TRAILHEAD	48204	30	Likely	1-2 months
COAL/INDEPENDENCE LAKES TRAILHEAD	48220	40	Somewhat Likely	1-2 months (partial disruptions)
PERRY CREEK TRAILHEAD	48222	45	Likely	1 month (Partial disruptions)
FORKS OF CANYON CREEK TRAILHEAD	48211	5	Currently Inaccessible	N/A
GOLD BASIN MILL POND INTERPRETIVE TRAIL	48202	10	Currently Closed	N/A
HEATHER LAKE TRAILHEAD	48203	75	Likely	1-2 months
ICE CAVES TRAILHEAD	48207	75	Unlikely	No closures
KELCEMA LAKE TRAILHEAD	48219	30	Somewhat Likely	1-2 months (partial disruptions)
LAKE TWENTY-TWO TRAILHEAD	30352	75	Unlikely	No closures
WALT BAILEY/MALLARDY RIDGE TRAILHEAD	48212	30	Likely	3 months+
MARTEN CREEK TRAILHEAD	48239	0	Unlikely	No closures
MEADOW MOUNTAIN TRAILHEAD	48210	10	Currently Inaccessible	N/A
MT PILCHUCK TRAILHEAD	13128	65	Likely	1-2months
PINNACLE LAKE TRAILHEAD	48123	30	Somewhat Likely	1-2 months (partial disruptions)
SUNRISE MINE TRAILHEAD	48223	40	Likely	3 months+
THREE FINGERS LOOKOUT TRAILHEAD	48215	16	Currently Inaccessible	N/A

*Color Indicators:

High use/closure potential/impact		
Moderate use/ closure potential/impact		
Low use/closure potential/impact		

Table 4. Visitor Use and Displacement Summary

SITE NAME	SITE NUMBER	ESTIMATED NUMBER OF VISITORS PER DAY DURING PEAK SEASON ON WEEKENDS	ESTIMATED NUMBER OF VISITORS PER DAY DURING PEAK SEASON ON WEEKDAYS	TOTAL ESTIMATED NUMBER OF VISITORS IMPACTED FOR DURATION OF CLOSURE IF CLOSED DURING PEAK SUMMER SEASON
BOARDMAN LAKE TH	48204	50	15	1,512
COAL/INDEPENDENCE LAKES TRAILHEAD	48220	80	20	2,560
DICKERMAN MTN/PERRY CREEK TH	48222	95	30	1,500
FORKS OF CANYON CREEK TH	48211	<10	<5	N/A
GOLD BASIN MILL POND	48202	<10	<5	N/A
HEATHER LAKE TH	48203	200+	80+	12,000+
ICE CAVES TH	48207	250+	60+	No closures or major disruptions expected
KELCEMA LAKE TH	48219	50	15	1,680
LAKE TWENTY-TWO TH	30352	250	80	No closures or major disruptions expected
WALT BAILEY/MALLARDY RIDGE TH	48212	60	15	2,520
MARTEN CREEK TH	48239	<10	<5	No closures or major disruptions expected
MEADOW MOUNTAIN TH	48210	<10	<5	N/A
MT PILCHUCK TH	13128	225+	75+	12,500+
PINNACLE LAKE TH	48123	50	10	1,520
SUNRISE MINE TH	48223	100	30	6,460
THREE FINGERS TH	48215	15	<5	N/A

Dispersed recreation experiences

Use analysis and field surveys found that dispersed recreation is concentrated or clustered in proximity to a drivable road and aquatic feature or attraction. Examples like car or tent camping can be found along the MLSBand most Forest Service Roads with a maintenance level 3 or higher. There are also some areas where the public has developed access to sites that are semi-secluded, accessed by vehicle but require walking into a dispersed site.

The proposed alternative would have no significant long-term effect on the concentration of dispersed recreation experiences, except where short-term closures might occur. The decommissioning of 14 miles of road and storage of 73 miles of road may inadvertently create a landscape where additional dispersed sites may be developed by the public. For hikers and campers, more under-utilized and suitable areas within the Corridor would remain available for recreational access at other highly visited recreation corridors in the Darrington Ranger District, or other adjacent public lands.

Effects to Public Safety

Exposure and risk from harvest related activities

Exposure to thinning related activities (i.e. falling, bucking, yarding, decking and hauling) may occur within and adjacent to the proposed stands. Thinning operations, such as yarding and decking, are inherently dangerous activities, even to those who are familiar with such settings.

The proposed action alternative, as mitigated, would reduce potential exposure and risk to public safety from active harvest related activities. Public access would be temporarily suspended and access roads would be temporarily closed during active thinning activities. A 100 foot no cut buffer around Heather Lake and Perry Creek trails would be implemented, reducing risk of injury to recreationists on these trails. Traffic signs along roads being used for timber haul and associated road work would be utilized to inform the public of road and traffic hazards.

In addition, timber harvest activities generally require that roads be brought up to better maintenance standards to facilitate safe and efficient logging operations. Once activities are concluded, the roads are often left in better shape than before, making the driving experience for visitors safer and more enjoyable.

Effects to Recreation Opportunity Spectrum (ROS)

Naturalness, Remoteness, Encounters and Access Values

Changes to ROS anticipated by the thinning activities would be minimal or temporary. Some changes include a temporary increase in visitor encounters anticipated, since the thinning activity near the immediate concentration of recreational areas would result in strategic closures to single sites, thus shifting visitation to other areas. The naturalness, remoteness, encounters, and access values associated with the current Roaded Natural ROS rating within the Analysis area would not change significantly from current conditions after completion of the project.

Developed Facilities (Campgrounds, Picnic Areas and Trails)

Under the proposed alternative, the project would retain all existing FS facilities (i.e. campgrounds, picnic areas, trails or trailheads) or other types of developed facility resources (State Parks & and

Department of Natural Resources Trails) provided by other agencies. The proposed action would improve the condition and amenities in key recreation sites throughout the project area, including Heather Lake, Sunrise Mine, and Walt Bailey Trailheads. The proposed action would provide recreation site improvements as described below.

Dispersed Sites (Camping, Fishing, Hunting, and driving for pleasure)

Under the proposed alternative, the project would retain all existing FS facilities (i.e. campgrounds, picnic areas, trails or trailheads) or other types of developed facility resources (State Parks & and Department of Natural Resources Trails) provided by other agencies. The proposed action would improve the condition and amenities in key recreation sites throughout the project area, including Heather Lake, Sunrise Mine, and Walt Bailey Trailheads. The proposed action would provide recreation site improvements as described below.

Recreation Site Improvements

The proposed action includes improving the condition of recreation sites and amenities in key recreation sites throughout the project area. Many recreation sites along the MLSB do not have sufficient parking capacity for the level of use. These improvements would result in positive effects to enhancing the recreation experience as outlined below.

Heather Lake Trailhead Expansion

The Heather Lake parking lot which currently has space for roughly 25 vehicles is filled to capacity on most weekends and holidays throughout the year causing visitors to park along both sides of the road which constricts traffic going to Mt. Pilchuck Trailhead and causes safety concerns for pedestrians walking along the roadside. Over 100 cars have been counted parked at the trailhead and along the road. This trail is one of the most heavily used on the Darrington Ranger District and provides access through magnificent old-growth forest to a beautiful alpine lake which is also enjoyed during the winter as a popular snowshoeing and other snow activities destination. Volunteer groups constructed the bottom ½ mile of the trail in the early 1990's and continue to maintain it. The parking lot would be expanded from approximately 25 parking slots to 75 by removing 1 acre of vegetation on the north side of the parking lot perimeter. Brush, rocks and most trees within the 1 acre footprint would be removed. Wheel stops would be installed in the new parking slots. The total area of new disturbance would be approximately 1 acre. The current ROS designation for the existing parking area is 1D Roaded Natural which allows for expansion by Forest Plan standards. There would be no change or effects to ROS standards with this improvement.

Sunrise Mine Trailhead Relocation and Expansion

Similar to Heather Lake, this popular destination is often overcrowded causing visitors to park along both sides of an already narrow Forest road causing unsafe conditions for drivers driving on both sides of the road during the busy summer season. The proposal is to relocate the Sunrise Mine Trailhead back to a flat ridge approximately ½ mile north of the existing trailhead. The section of road between there and the current road end would be

decommissioned and converted to trail following completion of stand treatments. The area surveyed offers the opportunity for an expanded and safer Sunrise Mine Trailhead and picnic site that would enjoy one of the most spectacular view points available from a road on the MBS. Weekend car counts at the current trailhead exceed 100 vehicles at times. Parking space for approximately 75 cars would be provided for the trailhead and picnic site combined by removing approximately 1-2 acres of vegetation along the east and west sides of the existing road. Wheel stops would be installed in the new parking slots. The total area of new disturbance would be approximately 1-2 acres. The current ROS designation for the existing parking area is 1D Roaded Natural which allows for development of recreation facilities for the purpose of enhancing the recreation experience or protecting resources by Forest Plan standards. There would be no change or effects to ROS standards with this improvement.

Walt Bailey Trailhead Relocation and Expansion

Similar to Sunrise Mine, this trailhead would be relocated approximately 1 mile back along the road from its current location. The section of road between there and the current road end would be decommissioned and converted to trail following completion of stand treatments. Parking slots for approximately 30 vehicles will be provided by removing less than 1 acre of vegetation. Wheel stops would be installed in the new parking slots. The total area of new disturbance would be approximately 1 acre. The current ROS designation for the existing parking area is 1D Roaded Natural which allows for expansion by Forest Plan standards. There would be no change or effects to ROS standards with this improvement.

Effects of Road Maintenance Level Changes

The proposed action would decommission 14 miles and store 73 miles of roads in the existing road network. The proposed road maintenance level changes that call for closing or decommissioning are occurring on roads that are already closed to motor vehicle use or are not being maintained for motor vehicles. All of the roads that lead to developed recreation sites are proposed to be maintained for passenger vehicles and in some cases being upgraded to higher maintenance level standards (102.55 miles of roads maintained at a standard for passenger vehicles). As such, the proposed maintenance levels will not have detrimental effects to recreation resources or cause changes to the ROS spectrum. While some of these roads are currently used for dispersed recreation opportunities or for hunting and gathering, the public will still have access by foot and dispersed recreation activities will still be available in the vast majority of open roads. Motor vehicle access on decommissioned roads will not be available as vegetation and trees grow in overtime and berms are placed to facilitate revegetation and rehabilitation of decommissioned roads.

Cumulative Effects Analysis

Table ##Past, Present, and Reasonably Foreseeable Future Actions for

The spatial and temporal scale (area and time of effect of the Stillaguamish Vegetation Management Project) considered for analysis of cumulative effects to the recreation resource

is the South Fork Stillaguamish River sub-watershed, where effects from this project can be considered with other projects. In order for effects of the proposed project to be cumulative to effects from existing or planned projects, they must overlap in both space and time (and in type of effect). The proposed project has the potential to overlap in both time and space with the Gold Basin Sediment Reduction Project. This project would require that the Gold Basin Campground be closed during project implementation. However, Gold Basin Campground is currently closed and there is not a timeframe for reopening at this time. Also the ERFO Road Repairs project will overlap in time and space. During road repair and mobilization of machinery, some roads used to access recreation sites or trailheads may be temporarily disrupted while work is being done to reopen the road. The Washington Department of Natural Resources is currently developing a hiking trails plan in the Morning Star Recreation Area, which is adjacent to the proposed area for this project. The plan may implement improvements to various hiking trails and recreation destinations. No specific projects have been identified at this time. The plan is scheduled to be completed in summer 2018.

Project or Activity and	Type of	Ove	rlap?	Cumulative Effect?
Description	Effect	Time	Space	
Future Actions				
Future timber harvest on private and state lands	Indirect	N	N	This project would not have lingering effects to Recreation resources with which the Stillaguamish Project could overlap.
Morning Star Trails Planning	Indirect	N	N	This project would not have lingering effects to Recreation resources with which the Stillaguamish Project could overlap at this time. Trail plan is scheduled to be completed in Summer 2018, at this time no specific ground disturbing projects have been proposed.
Gold Basin Sediment Reduction Project	Direct	Y	Y	This project would require that the Gold Basin Campground be closed during project implementation. However, Gold Basin Campground is currently closed and there is not a timeframe for reopening at this time.
Campground/Rental Maintenance - Hazard Tree removals	Indirect	N	Y	This project not would have lingering effects with which the Stillaguamish Project could overlap.
ERFO Road repairs -	Indirect	Y	Y	During road repair and mobilization, some roads used to access recreation sites or trailheads may be temporarily disrupted while work is being done to reopen the road.
Mt. Loop Road maintenance	Indirect	Y	Y	General road maintenance may cause minor dispruptions to access along the Mt. Loop Highway.
Secondary Road and Trail Maintenance	Indirect	Y	Y	Effect of this action would be beneficial to recreation resources.
Ice Caves Bridge Repair and Boardwalk Upgrade	Indirect	Y	N	This project would not have lingering effects with which the Stillaguamish Project could overlap.

Camp Silverton Building removal and permit transfer to USFS	Indirect	Y	N	This project would not have lingering effects with which the Stillaguamish Project could overlap.
Present Actions				
Campground/Rental Maintenance - Hazard Tree removal	Indirect	N	N	Effects were discussed in "Affected Environment" section of the Report.
Mt. Loop Road maintenance	Indirect	Y	Y	Effects were discussed in "Affected Environment" section of the Report.
Mt. Loop Emergency Road Repair	Indirect	Y	N	Effects were discussed in "Affected Environment" section of the Report.
Secondary Road maintenance	Indirect	N	N	Effects were discussed in "Affected Environment" section of the Report.
Trail maintenance	Indirect	Y	Y	Effects were discussed in "Affected Environment" section of the Report.
Invasive Plant Treatments	Indirect	Y	Y	Effects were discussed in "Affected Environment" section of the Report.
Non-Federal Land Timber Harvest:	Indirect	Y	N	Effects were discussed in "Affected Environment" section of the Report.
Past Actions (address in curren	t condition)			
Waldheim Emergency Road repairs	Indirect	N	Y	Effects were discussed in "Affected Environment" section of the Report.
River Road repairs	Indirect	N	Y	Effects were discussed in "Affected Environment" section of the Report.
Road, trail and campground maintenance	Indirect	Y	Y	Effects were discussed in "Affected Environment" section of the Report.
Invasive Plant Treatments	Indirect	Y	Y	Effects were discussed in "Affected Environment" section of the Report.
Red Bridge Campground road repair	Indirect	N	Y	Effects were discussed in "Affected Environment" section of the Report.
Timber sale activity in Canyon Creek	Indirect	Y	N	Effects were discussed in "Affected Environment" section of the Report.

9. Forest Plan Consistency

1990 Land and Resource Management Plan – Mt. Baker-Snoqualmie National Forest (LRMP) and 1994 Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl (ROD).

General - Other resource activity planning should incorporate plans to provide or improve compatible recreation facilities/services (1990 LRMP, p. 4-84). Response: SF Stillaguamish Vegetation project proposed actionincorporates plans to provide for compatible recreation facilities/services within the project area or Corridor.

Developed Recreation - Provide for visitor safety, sanitation and protect facility and site resources (1990 LRMP, p. 4-85). Response: SF Stillaguamish Vegetation project proposed actionis consistent by upgrading new trailhead facilities as needed and improving access by improving roads and expanding parking capacity.

Trails - Provide a system of trails that compliments resource capabilities and diverse users (1990 LRMP, p. 4-86 to 4-87). Trails shall assume the Visual Quality Objective (VQO) of the Management Area (MA) they pass through (1990 LRMP, p. 4-86 to 4-87). A broad spectrum of trail types will be provided (1990 LRMP, p. 4-86 to 4-87). Seasonal use restrictions will be utilized to manage conflicts in use (1990 LRMP, p. 4-86 to 4-87). Response: All project alternatives are consistent with this direction within the project area or Corridor. The spectrum of trail types will not change and visual quality objectives of trails will be maintained. Specific mitigation measures which limit closures of Heather Lake and Mt. Pilchuck trailheads during peak season would minimize use conflicts.

Management Area 1B Semi Primitive Non-Motorized - Trails located to take advantage of viewing opportunities located in high visual Absorption Capability terrain, and serve to disperse users (1990 LRMP, p. 4-161). Response: SF Stillaguamish project alternatives are consistent with this S&G within the project area or Corridor. The spectrum of trail types would not change and visual quality objectives of trails would be maintained.

Management Area 1D Roaded Natural - Emphasis will be given to day use recreation and facilities (1990 LRMP, p. 4-166). Response: SF Stillaguamish Vegetation project proposed actionis consistent with direction by upgrading new trailhead facilities as needed and improving access by improving roads and expanding parking capacity.

Management Area 2A (Scenic Viewshed Foreground) - Developed site may be allowed. Plan for roaded natural and rural ROS class standards (1990 LRMP, p. 4-169). Occupancy and use of recreation sites shall be regulated to the extent necessary to protect the resources and to ensure safe, enjoyable recreation experiences (1990 LRMP, p. 4-176). Response: SF Stillaguamish Vegetation project proposed actionis consistent with Forest Plan S & G's by implementing measures that maintain Retention and Partial Retention VQO standards. The proposed actionis consistent by upgrading new trailhead facilities as needed and improving access by improving roads and expanding parking capacity.

Management Area 2B (Scenic Viewshed Middle Ground) - Developed Recreation Sites (Public Sector) - Within the designated Scenic Viewshed Corridor (2B-Middleground), developed sites may be allowed. Plan for semi-primitive motorized, roaded natural and roaded modified ROS class standards (1990 LRMP, p. 4-172). Occupancy and use of recreation sites shall be regulated to the extent necessary to protect the resources and to ensure safe, enjoyable recreation experiences (1990 LRMP, p. 4-176). Response: SF Stillaguamish Vegetation project proposed actionis consistent with Forest Plan S & G's by implementing measures that maintain Partial Retention VQO standards. The proposed actionis consistent by upgrading new trailhead facilities as needed and improving access by improving roads and expanding parking capacity.

Management Area 5A Recommended Recreation River - Proposed recreation activities shall be compatible with river values. Development scale should not exceed level 4. Occupancy and use of recreation sites shall be regulated to the extent necessary to protect the resources and to ensure safe, enjoyable recreation experiences (1990 LRMP, p. 4-176). Response: SF Stillaguamish project alternatives are consistent with this S&G within the projectarea or Corridor. The project establishes mitigations related to aquatic conservation resources which stipulates a 100 foot no cut buffer on both sides of the South Fork Stillaguamish River. Thus, evidence of timber harvest activities would not directly affect or be visible from the River and management activities would meet both Retention and Partial Retention standards.

10. Public Comments and Responses

11. References and Citations

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Washington State Office of Financial Management (2012). Washington State Growth Management Population Projections 2010-2040. http://www.ofm.wa.gov/pop/gma/projections12/projections12.asp 12. Maps (Indexed) if not within report